

Colasidia convexior sp. n.,
a further new leleupidiine beetle from Sumatra

(Coleoptera, Carabidae, Zuphiini)

By Martin BAEHR

Abstract

Colasidia convexior sp. n. from western Sumatra is described and compared with the most closely related species *Colasidia lustrans* BAEHR and *C. brevicornis* BAEHR.

In a sample of carabid beetles collected in western Sumatra by A. RIEDEL, a small series of a further new leleupidiine beetle was discovered that is described below. This is the third species of the genus *Colasidia* collected recently in Sumatra (BAEHR 1991).

Measurements

Measurements have been made under a stereo microscope using an ocular micrometer. Length has been measured from tip of labrum to apex of elytra, hence, measurements may slightly differ from those of other authors. Length of head has been measured from anterior border of clypeus to anterior border of "neck".

Colasidia convexior sp. n.

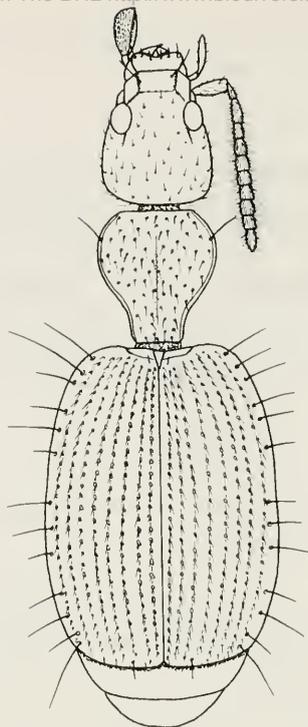
Figs 1, 2

Types. Holotype: ♂, W-Sumatra, Batang Palupu, Bukittinggi, 1400-1500 m, 19.10.1991, leg. A. RIEDEL (Zoologische Staatssammlung, München). - Paratypes: 1 ♂, 3 ♀, same data (Collection M. BAEHR, München).

Diagnosis. Small species of genus *Colasidia*, characterized by small eyes, distinctly widened base of head, moderately coarse puncturation, and internal sac of ♂ aedeagus at bottom with a large, strongly sclerotized, oblique sclerite deeply split into elongate teeth on both ends, and basally at top with a similarly dentate, somewhat coiled sclerite. Further distinguished from the most similar species *C. lustrans* BAEHR from Sumatra and *C. brevicornis* BAEHR from Sarawak by following characters: Smaller size, slightly more rounded orbits, wider pronotum, slightly wider and shorter elytra, and presence of only 1 ventral ensiform seta on ♀ stylomere 2 in comparison with *C. lustrans*; slightly more rounded orbits, wider pronotum, slightly knob-shaped instead of upturned apex of ♂ aedeagus, and larger sclerite inside of internal sac of ♂ aedeagus in comparison with *C. brevicornis*.

Description

Measurements. Length: 4.2-4.3 mm; width: 1.60-1.65 mm. Ratios. Length/width of head: 1.34-1.36; width/length of pronotum: 0.94-0.97; widest part/base of pronotum: 1.92-1.94; width of head/width of pronotum: 0.86-0.88; length/width of elytra: 1.35-1.36; width of elytra/width of pronotum: 1.90-1.93.



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Fig. 1: *Colasidia convexior* sp. n. ♂ holotype. Length: 4.2 mm.

Colour. Dark piceous, pronotum, suture and margins of elytra faintly lighter. Labrum, palpi, antennae, and legs yellowish.

Head. Moderately elongate, distinctly widened posteriorly, orbit posteriorly shortly rounded off, head widest far behind eyes. Upper surface fairly convex. Eyes small, laterally barely projecting, less than 1/2 of length of orbit to beginning of curvature, c. 1/4 of length of complete orbit. Clypeus anteriorly almost straight. Labrum anteriorly barely excised. Mandibles short. Mentum with unidentate, at apex slightly excised tooth. Labium truncate. Maxillary palpus rather narrow, basal segment slightly thickened. Terminal segment of labial palpus very large. Antenna rather short, attaining almost the middle of pronotum. Median segments as wide as long, 3rd segment c. 3/5 x as long as 1st segment, not much longer than 2nd segment. Surface with very few, rather fine punctures, without microreticulation, glossy. Pilosity very sparse, moderately elongate, anteriorly inclined.

Pronotum. Moderately cordiform, slightly longer than wide, distinctly wider than head, widest in anterior third. Upper surface evenly convex to lateral margin. Sides convex in anterior half, deeply sinuate in front of posterior angles. Apex rather narrow, almost straight, anterior angles barely projecting. Base narrow, laterally excised, posterior angles moderately projecting. Lateral margin with distinct border line, but with narrow marginal channel. Median line fine, not sulcate. Prebasal grooves moderately deep. Margin distinct, anterior seta situated at anterior third of pronotum. Surface with rather sparse, moderately coarse punctures, without microreticulation, highly glossy. Pilosity sparse, rather short, inclined posteriorly.

Elytra. Moderately wide, laterally evenly curved, widest slightly behind middle, upper surface rather depressed. Shoulders wide, rounded off. Apex rather wide, almost completely transverse, barely convex. Striae marked by regular rows of rather coarse punctures, intervals barely convex. Fixed setae of 3rd stria not recognizable within the puncturation. Series of marginal punctures difficult to detect, apparently consisting of 6 basal, 3 postmedian, and 5 apical pores. Surface without microreticulation, highly glossy. Pilosity regular, rather sparse, fairly short, inclined posteriorly.

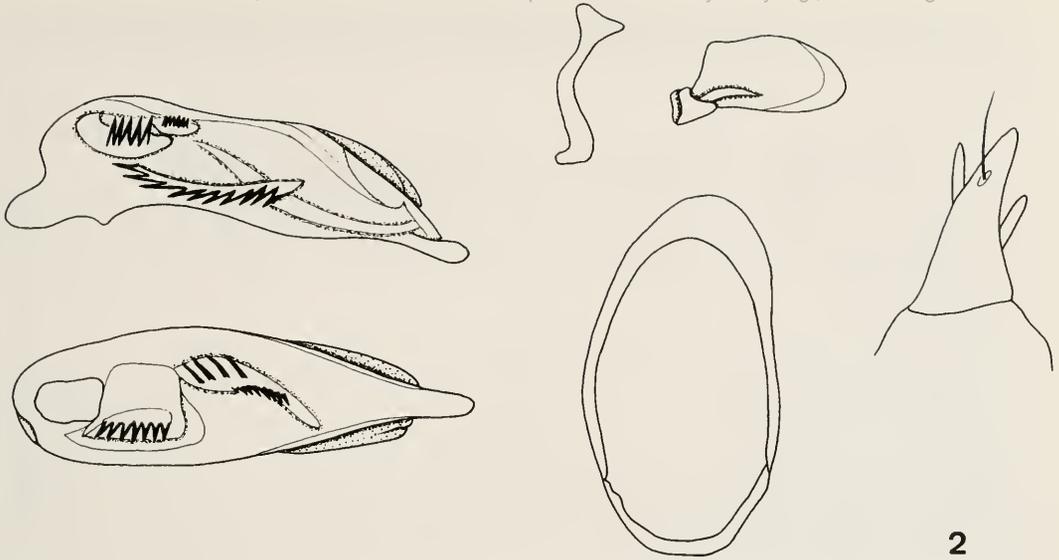


Fig. 2: *Colasidia convexior* sp. n. Aedeagus in lateral and ventral view, parameres, ♂ genital ring, and ♀ stylomere 2.

Abdomen. Densely punctate and with rather short pilosity.

Legs. Elongate. Pilosity rather sparse. ♂ anterior tarsus not expanded, with feeble vestiture on three basal segments.

♂ genitalia. Sternum VII with a single seta on either side. Genital ring rather wide, almost completely oval, slightly asymmetric. Aedeagus rather short, with short, though slightly thickened or even faintly knob-like apex. Lower surface markedly bisinuate. Internal sac at bottom with a large, strongly sclerotized, oblique sclerite deeply split into elongate teeth on both ends, and basally at top with a similarly dentate, somewhat coiled sclerite. Parameres as in fig. 2. Right paramere comparatively elongate and delicate.

♀ genitalia. Sternum VII with a single seta on either side. Stylomere 2 rather elongate with acute apex, with only one elongate ventral ensiform seta, one elongate dorsal ensiform seta, and a nematiform seta situated rather close to apex. Apex of stylomere 1 asetose.

Variation. Minor variation noted only in relative width of pronotum and elytra.

Distribution. West Sumatra. Known only from type locality.

Habits. Sieved from leaf litter in montane rain forest.

Etymology. The name refers to the more convex shape in comparison with the most closely related species *Colasidia lustrans* BAEHR from Sumatra.

Recognition

For recognition of this species the most recent key to the genus *Colasidia* in my last paper (BAEHR 1991) should be followed to couplet 7. Because the posterior curvature of the head is somewhat variable in this species, the decision to which of the following groups *C. convexior* belongs, is difficult. Therefore it may be found under both couplets 8 and 13. As a consequence, the key must be altered with regard to the following couplets:

- 11. Larger species (c. 4.9 mm long). Pronotum distinctly longer than wide (ratio width/length c. 0.9). Upper surface very glossy, ♂ aedeagus unknown. Sumatra *lustrans* BAEHR
- Smaller species (<4.4 mm long). Pronotum not or barely longer than wide. Upper surface variable. 12.

12. Larger species (>4 mm long). ♂ aedeagus either elongate and with faint terminal knob and strongly sclerotized sclerite inside of internal sac, or ♂ aedeagus unknown, in latter case species from New Guinea 12a.
- Smaller species (c. 3.7 mm long). ♂ aedeagus very short with short apex. Sarawak *pumila* BAEHR
- 12a. Puncturation of upper surface less coarse, rather irregular. ♂ aedeagus unknown. Papua New Guinea *madang* DARLINGTON
- Puncturation of upper surface coarse, regular. ♂ aedeagus elongate, with slight terminal knob, internal sac with strongly sclerotized, oblique, anteriorly and posteriorly dentate sclerite at bottom. Sumatra *convexior* sp. n.
13. Larger and wider species (c. 4.8 mm long). Head short and wide, feebly widened to posterior border. ♂ aedeagus sinuate on lower surface and strongly hooked at apex. Internal sac without sclerotized, dentate rod at bottom. Sarawak *taylori* BAEHR
- Smaller and less wide species (<4.5 mm long). Head longer, narrower, markedly widened to posterior border. ♂ aedeagus not sinuate nor strongly hooked at apex. Internal sac at bottom with dentate sclerite 14.
14. Pronotum narrower (ratio width/length c. 0.9). ♂ aedeagus gently upturned at apex. Sarawak *brevicornis* BAEHR
- Pronotum wider, almost as wide as long. ♂ aedeagus with faint knob at apex. Sumatra *convexior* sp. n.

Discussion

Colasidia convexior, sp. n. is perhaps most closely related to *C. lustrans* BAEHR from the same area. It is altogether the third species occurring in a very restricted range about Bukittinggi in West Sumatra. Here, like in some other localities in the Greater Sunda Islands (BAEHR 1988, 1990, 1991), several species of *Colasidia* occur sympatrically or even syntopically in the same area and have been actually collected together. The new species, however, occurs in a somewhat lower altitude than *Colasidia lustrans* BAEHR and *C. globiceps* BAEHR, and according to the collector, also in a different habitat.

Despite the rather uniform shape and external structure of most *Colasidia* species, it appears that the ♂ genitalia, especially the apex of the aedeagus and the structure of the internal sac, are fairly distinctive in each species. Actually, the structural diversity of the aedeagi, as far as they are known, is surprisingly great and certainly this will in future offer the best characters for distinction of species, perhaps also for a future evaluation of the phylogeny of this genus.

Literature

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Zeitschrift/Journal: [Mitteilungen der Münchner Entomologischen Gesellschaft](#)

Jahr/Year: 1993

Band/Volume: [083](#)

Autor(en)/Author(s): Baehr Martin

Artikel/Article: [Colasidia convexior sp. n., a further new leleupidiine beetle from Sumatra \(Col. Carabidae, Zuphiini\). 39-42](#)